

DETAILED ACTION

1. This is a Final office action in response to Applicant's reply of 12/05/2008.

Claims 18, 22, 28, and 32-61 are pending.

Response to Amendment

2. Applicant amends claims 38, 44, and 50 to address rejections under 35 U.S.C. 101 as to non-statutory subject matter. However, merely reciting "a computer-implemented method" in the preamble of method claim 38 does not itself constitute a sufficient tie to a particular computer, as no particular computer apparatus is recited and no non-trivial step in the method is recited as being performed by the computer. As such the method could be performed by a human using a computer to coordinate electronic messages received and transmitted by general computer means.

Accordingly, the rejections are maintained.

3. Applicant amends claims 32-38, 42, 44, 48, 50 and 54 to clarify that the "environment users" are manufacturers and service providers of the supply chain network, thus further clarifying the activities of the e-commerce supply-chain manager as between a manager and manufacturers and services providers (i.e. three different entities) which is consistent with Remarks (pg. 17) and discussion during Interview(s) noted by Applicant and later as attached hereto. Accordingly, objections made for lack of antecedent basis on "environment users" and rejections under 35 U.S.C. 112, 2nd paragraph, on this point are hereby withdrawn, and the claims are examined below as per these clarifications.

Response to Arguments

4. Applicant's arguments filed in Remarks of 12/05/2008) with respect to independent claims 38, 44, and 50 have been considered but are moot in view of the new ground(s) of rejection. New rejections are based on Applicant's amendments discussed above, the amendments further clarifying that the "environment users" of the claimed invention are manufacturers, service providers, and a manager with the manager receiving and transmitting maintenance notices, requests, and schedules through the e-commerce supply chain to and from the manufacturers and providers. This is consistent with Applicant's asserted distinction of the amended claims over Sekizawa as previously applied (see Remarks, pg. 16-17).

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 18, 38-43, 56 and 59 are rejected under 35 U.S.C. 101 based on Supreme Court precedent, and recent Federal Circuit decisions. For a process to be patentable subject matter under § 101 the process must (1) be tied to another statutory class of invention (such as a particular apparatus) or (2) transform subject matter to a different state or thing. See Diamond v. Diehr, 450 US 175, 184 (1981); Parker v Flook, 437 US 584, 588 n9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 US 780, 787-88 (1876). If neither of these requirements is met by the claim, the method is not a patent eligible process. To qualify under § 101 as a statutory

process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

In the present case, none of the claimed processes recite a sufficient tie to another statutory class of invention or transform an article to a different state or thing. Claim 38 recites a series of steps for receiving, planning, monitoring, scheduling, transmitting, and tracking information, which, broadly interpreted, encompasses the "manager" as being an individual. Merely reciting "a computer-implemented method" as in the preamble of method claim 38 does not itself constitute a sufficient tie to a particular computer, as no particular computer apparatus is recited and no non-trivial step in the method is recited as being performed by the computer. Therefore the method could be performed by a human using the computer to received and send electronic messages (e.g. email) a trivial use of a general-purpose computer with the substantive acts of the claimed invention (planning, monitoring, scheduling, and tracking) performed by a person. As such, the invention as claimed is ineligible for patenting under 35 U.S.C. 101.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 18, 22, 28, and 32-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. (US Pat. No. 6,151,582) in view of Melby et al. (US Pat. No. 6,952,680).

(Note: Claim 38 is the broadest claim with claims 18, 22, 28, and 32-37 dependent from higher numbered claims.)

Claim 38

Huang teaches a computer hardware-implemented method for providing maintenance and service between manufacturers and service providers in a network- based e-commerce supply chain environment (see Figures 1, 6 and esp. Figure 9; column 14, line 22 to column 15, line 11; Table 5 noting parallel analogy between equipment repair and manufacturing supply chains), wherein the e-commerce supply chain manager exists within the e-commerce supply chain environment and manages demand and supply planning of offerings from the plurality of manufacturers, order management and fulfillment, asset management, maintenance and service scheduling, inventory management, and distribution logistics for entities within the e-commerce supply chain environment (see Background and Summary of Invention: Huang is a complete supply chain environment;

and column 30, line 51 to column 31, line 18: with maintenance and service scheduling by the Aggregate Repair Plan); **(c) planning demand and supply of offerings from the plurality of manufacturers based upon availability of the offerings within the e-commerce supply chain environment** (generally, a supply-chain is a chain of manufacturers with available “offerings” of manufactured goods);

Huang further teaches the planning and scheduling of recommended maintenance and service including equipment repair requirements (see column 14, line 22 to column 16, line 29 esp. Table 5 noting the “parallel analogy” between equipment repair chains and manufacturing supply chains). Huang teaches a complete supply chain environment with maintenance and service scheduled by an Aggregate Repair Plan (column 30, line 51 to column 31, line 18; column 56 from line 47 and column 64 from line 47 all teaching activity schedules for equipment at the equipment location including equipment upgrade/maintenance schedules (preventive and breakdown maintenance schedules with planned activity schedules); however, Huang does not expressly teach managing the notices and requests regarding required maintenance for the ongoing repair and maintenance of its physical assets. Specifically, Huang does not teach:

- (a) receiving at an e-commerce supply chain manager a plurality of notices for recommended maintenance and service from a plurality of manufacturers;**
- (b) receiving at the e-commerce supply chain manager a plurality of requests for maintenance and service from a plurality of service providers;**

- (d) monitoring the availability of the plurality of manufacturers to perform maintenance and service within the e-commerce supply chain environment;**
- (e) managing the plurality of notices for recommended maintenance and service received from the plurality of manufacturers, and the plurality of requests for maintenance and service received from the plurality of service providers;**
- (f) scheduling maintenance and service at the e-commerce supply chain manager in a managed schedule based on the plurality of notices from the plurality of manufacturers matched to the plurality of requests from the plurality of service providers;**
- (g) transmitting the managed schedule for maintenance and service to the plurality of manufacturers or service providers who requested or recommended maintenance and service from the e-commerce supply chain manager;**
- (h) tracking the plurality of notices for recommended maintenance and service, the plurality of requests for maintenance and service, the managed schedule, and the progress of completing scheduled maintenance and service through a network tracking interface accessible within the e-commerce supply chain environment, and**

and (i) performing maintenance and service through the e-commerce supply chain environment based on the managed schedule.

Melby, however, teaches managing maintenance of physical assets for a fleet of equipment including and Analysis Controller Database (Figure 5; column 2, lines 41-67) for receiving notices and requests for recommended maintenance from manufacturers

and suppliers (see Summary of Invention;; esp. column 3, lines 1-20: describing coordination and communication among asset owners and third-parties, e.g. maintenance organizations, and asset manufacturers); monitoring the availability of manufacturers to perform maintenance service (see column 10, lines 12-50; and column 17, lines 5-20: and noting that prior to sending a work order for maintenance by a service provider, the service provider must have been determined "available" to perform the maintenance); scheduling maintenance and service and transmitting the scheduled service to a service provider (column 2, line 60 and column 17, lines 5-20: sending a work order); tracking the recommended maintenance (Figure 4A to Figure 8; column 2, lines 41-67); and performing the maintenance (column 17, line 22-36: "carry out the maintenance...").

It would have been obvious to one of ordinary skill in the art at the time of the invention the Huang's supply chain environment with full maintenance planning and execution capabilities would have been predictably improved by the asset management with maintenance capability of Melby. Huang and Melby each being in the art of supply-chain management (Huang being expressly so; Melby being a system of manufacturers, service providers, and asset owners who themselves may be manufacturers, i.e. a "supply chain"), one of ordinary skill in the art would have recognized the advantage of actively managing notices and requests for recommended maintenance as necessary for the repair and proper functioning of Huang's supply chain. One of ordinary skill in the art would also have recognized Huang's communication means (Figures 46 and 47) as capable of implementing the methods of Melby in at least the detail provided by the

present invention (see Specification pg. 46-7 and Figure 11) in that notices and requests for recommended service could be exchanged among the component suppliers and repair and maintenance contractors, with the predictable result that assets within the Huang supply chain would reliably receive repair and maintenance according to a recommended schedule.

Claim 18

Huang teaches the e-commerce supply chain environment manager performing load balancing services that initiate and stop processes as utilization levels vary in the e-commerce supply chain (column 142, line 13: the ServerManager performs load balancing services).

Claim 32

Huang teaches wherein the step of performing maintenance and service includes indexing received feedback from manufacturers and service providers ((see Figure 8 showing numerous “feedback” paths within the supply chain environment including databases which store information; storage of information “feedback” inherently includes “indexing” in a database as is necessary for information retrieval).

Claim 33

Huang teaches wherein the data stored in the e-commerce supply-chain environment is indexed according to a profile for each framework user (see Figure 8 showing numerous “feedback” paths within the supply chain environment).

Claim 39

Huang teaches **updating data items stored in the e-commerce supply chain environment selected from the group consisting of merchandising content, currency exchange rates, tax rates, and pricing information** (see Figure 1: Product Info is a data item describing "merchandising content").

Claim 40

Huang teaches **synchronizing data stored separately from the e-commerce supply chain environment with data stored in the e-commerce supply chain environment** (see Figure 1: the Supply Chain Network Configurator "synchronizes" (makes concurrent in one time and location) data from suppliers, producers, customers, etc.).

Claim 41

Huang teaches **optimizing at least one operation of the e-commerce supply chain environment selected from the group consisting of server processes, disk space, memory availability, CPU utilization, access time to a server, and connection load** (column 142, line 13: the ServerManager performs load balancing services, thereby optimizing CPU utilization).

Claim 42

Huang teaches **sending feedback response requests to the plurality of manufacturers and service providers of the e-commerce supply chain environment** (see Figure 8 showing numerous "feedback" paths within the supply chain environment).

Claim 43

Huang the e- commerce supply chain environment manager searching the data stored in the e- commerce supply chain environment prior to synchronization (see Figure 1: the Supply Chain Network Configurator “synchronizes” (makes concurrent in one time and location) data from suppliers, producers, customers, etc. where “searching the data” prior to synchronization is a necessary step to accessing the data for information retrieval and synchronization in the supply chain database).

Claims 44, 22, 34, 35, 45-49, and claims 50, 28, 36, 37, and 51-55 recite substantially the methods of claims 38 as performed by a computer program on computer readable medium, and are similarly rejected for reasons given above for the respective claim and claim elements, and that both Huang and Melby are performed by a server/computer system(s) operating from internal computer readable medium.

Claims 56-58 recite the method, executable computer program and computer readable medium of claims 38, 44, and 52, respectively, and *wherein the manufacturer is a network bandwidth provider and the service provider is a network bandwidth distributor*. However, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. None of the elements of claims 38, 44, and 52 results in a structural difference with the manufacturer or service provider being a *network bandwidth* provider or distributor. Therefore, the claims are rejected as above for their respective parent claims.

Allowable Subject Matter

9. Claims 60-61 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. (Note that claim 59 is rejected under 35 U.S.C. 101 and would also be allowable if amended to overcome the rejection as well as incorporate limitations of the parent claim).

Claims 59-61 recite the method, executable computer program and computer readable medium of claims 38, 44, and 52, respectively, further comprising
monitoring the progress of the plurality of manufacturers in completing scheduled maintenance and service utilizing the network, adjusting the schedule according to the progress of the plurality of manufacturers, and transmitting the adjustments to the schedule to the plurality of manufacturers and the plurality of service providers of the utilizing the network.

While Huang and Melby each teach generating a schedule of maintenance, including Melby teaching monitoring and reporting on the progress of manufacturers and service providers providing maintenance (see Figures 4A-C and Summary), neither of Huang or Melby or the prior art of record, alone teach or fairly suggest in combination the recited limitations for managing notices and requests for recommended maintenance from a plurality of manufacturers and service providers in an e-commerce supply chain environment, as in claims 38, 44, and 52, and further *transmitting adjustments to the schedule according to the monitored progress in completing the scheduled maintenance and service.*

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Robertson whose telephone number is (571)272-8220. The examiner can normally be reached on 8 am to 6 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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